

REMARKS

This responds to the Office Action mailed on July 27, 2005.

Claims 1, 10, 12, 14, 20, 24, and 26 are amended, claims 2 and 17 are canceled, claim 6 is withdrawn; as a result, claims 1, 3-16 and 18-30 are now pending in this application. Limitations of cancelled claim 2 appear in claim 1.

§102 Rejection of the Claims

Claims 1-4, 14-17, 20, 21, 24 and 25 were rejected under 35 USC § 102(b) as being anticipated by Iwabuchi (U.S. 6,434,017). Applicant respectfully traverses this rejection and requests the Office to consider the following.

“A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” (*Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987), M.P.E.P. §2131, 8th Ed., Rev. 1).

Claim 1 as amended includes the limitation taken from claim 2. Claim 1 therefore includes the limitation

a substantially planar surface that is parallel planar to the first die active first surface, and planar located above the first die active first surface at a height that is a fraction of the die height

(Claim 1). The Office Action asserts that Iwabuchi teaches “a substantially planar surface that is selected from parallel planar to first die, (Figure 3 #1), active first surface” (Office Action at pages 2 and 3). Applicant respectfully disagrees. Iwabuchi teaches only a continuously curvilinear surface that is part of his “sealing resin 3”. (Iwabuchi at column 4, line 11 and at FIG.3). Because Iwabuchi does not teach all the limitations of claim 1, Iwabuchi does not anticipate claim 1. Withdrawal of the rejection is respectfully requested. Applicant notes that claims 2-9 depend from claim 1 and therefore are also not anticipated by Iwabuchi. Withdrawal of the rejections is respectfully requested.

Independent claim 10 as amended includes the limitation taken substantially from claim 2. Claim 10 therefore includes the limitation

a molding compound cap ... that is substantially parallel planar to the first die backside second surface

(Claim 10). Iwabuchi teaches only a continuously curvilinear surface that is part of his “sealing resin 3”. (Iwabuchi at column 4, line 11 and at FIG.3). Because Iwabuchi does not teach all the limitations of claim 10, Iwabuchi does not anticipate claim 10. Withdrawal of the rejection is respectfully requested. Applicant notes that claims 11-13 depend from claim 10 and therefore are also not anticipated by Iwabuchi. Withdrawal of the rejections is respectfully requested.

Independent claim 14 as amended includes the limitation taken from claim 17. Claim 14 therefore includes the limitation

a substantially planar surface that is parallel planar to the first die active first surface, and parallel planar located above the first die active first surface at a height that is a fraction of the die height

(Claim 14). Iwabuchi teaches only a continuously curvilinear surface that is part of his “sealing resin 3”. (Iwabuchi at column 4, line 11 and at FIG.3). Because Iwabuchi does not teach all the limitations of claim 14, Iwabuchi does not anticipate claim 14. Withdrawal of the rejection is respectfully requested. Applicant notes that claims 15-17 depend from claim 14 and therefore are also not anticipated by Iwabuchi. Withdrawal of the rejections is respectfully requested.

Independent claim 20 as amended includes the limitation taken essentially from claim 2. Claim 20 therefore includes the limitation

causing a molding cap compound ... that is substantially above the die active first surface and below the die backside second surface, and that forms a third surface that is substantially parallel to the die backside second surface

(Claim 20). Iwabuchi teaches only a continuously curvilinear surface that is part of his “sealing resin 3”. (Iwabuchi at column 4, line 11 and at FIG.3). Because Iwabuchi does not teach all the limitations of claim 20, Iwabuchi does not anticipate claim 20. Withdrawal of the rejection is respectfully requested. Applicant notes that claims 21-23 depend from claim 20 and therefore are also not anticipated by Iwabuchi. Withdrawal of the rejections is respectfully requested.

Independent claim 24 as amended includes the limitation taken essentially from claim 2. Claim 24 therefore includes the limitation

forming a molding cap compound ... third surface that is parallel planar and above the first die active first surface and below the first die backside second surface

(Claim 24). Iwabuchi teaches only a continuously curvilinear surface that is part of his “sealing resin 3”. (Iwabuchi at column 4, line 11 and at FIG.3). Because Iwabuchi does not teach all the limitations of claim 24, Iwabuchi does not anticipate claim 24. Withdrawal of the rejection is respectfully requested. Applicant notes that claims 24-30 depend from claim 24 and therefore are also not anticipated by Iwabuchi. Withdrawal of the rejections is respectfully requested.

§103 Rejection of the Claims

Claim 28 was rejected under 35 USC § 103(a) as being unpatentable over Iwabuchi. Applicant respectfully traverses the rejection and requests the Office to consider the following.

To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). (M.P.E.P. § 2143 8th Ed, Rev.1).

Regarding claim 28, the Office Action makes a bare statement of unpatentability, that has no reference to how or where Iwabuchi teaches the limitations. Rather, the Office Action repeats, verbatim, a portion of claim 28, but does not refer to where such teaching is to be found or suggested in Iwabuchi. Because findings of fact have not been coupled with rulings of law, Applicant respectfully asserts that an inadequate statement of unpatentability has been made and therefore requests withdrawal of the rejection.

Applicant also notes the Office has characterized claim 28 as a product-by-process claim. This is incorrect. Claim 28 states “the process ... wherein forming ... includes injection molding.” This is a process claim. Withdrawal of the rejection is respectfully requested.

Claims 5, 7-13, 18, 19, 22, 23, 26, 27, 29, and 30 were rejected under 35 USC § 103(a) as being unpatentable over Iwabuchi, probably in view of Naka (U.S. 6,727,583 B2). Applicant cannot be certain of this rejections since the statement of rejection ends with the phrase "... Iwabuchi in view of U.S. Patent No." (sic). Assuming that the Office intended to state Naka, Applicant respectfully traverses the rejection and requests the Office to consider the following.

Regarding claim 5-9, these claims depend from independent claim 1. As set forth above, Iwabuchi does not teach the limitation in claim 1, of "a substantially planar surface that is parallel planar to the first die active first surface, and planar located above the first die active first surface at a height that is a fraction of the die height". Naka adds nothing to remedy this deficiency. Because all the claim limitations are not taught in the cited references, alone or in combination, a *prima facie* case of obviousness has not been established. Withdrawal of the rejection is respectfully requested.

Regarding claim 10-13, these claims depend from independent claim 10. As set forth above, Iwabuchi does not teach the limitation in claim 10, of "a molding compound cap ... that is substantially parallel planar to the first die backside second surface" Naka adds nothing to remedy this deficiency. Because all the claim limitations are not taught in the cited references, alone or in combination, a *prima facie* case of obviousness has not been established. Withdrawal of the rejection is respectfully requested.

Regarding claims 18 and 19, these claims depend from independent claim 14. As set forth above, Iwabuchi does not teach the limitation in claim 14, of "a substantially planar surface that is parallel planar to the first die active first surface, and parallel planar located above the first die active first surface at a height that is a fraction of the die height". Naka adds nothing to remedy this deficiency. Because all the claim limitations are not taught in the cited references, alone or in combination, a *prima facie* case of obviousness has not been established. Withdrawal of the rejection is respectfully requested.

Regarding claims 22 and 23, these claims depend from independent claim 20. As set forth above, Iwabuchi does not teach the limitation in claim 20, of "causing a molding cap compound ... that is substantially above the die active first surface and below the die backside second surface, and that forms a third surface that is substantially parallel to the

die backside second surface”. Naka adds nothing to remedy this deficiency. Because all the claim limitations are not taught in the cited references, alone or in combination, a *prima facie* case of obviousness has not been established. Withdrawal of the rejection is respectfully requested.

Regarding claims 26, 27, 29, and 30, these claims depend from independent claim 24. As set forth above, Iwabuchi does not teach the limitation in claim 24, of “forming a molding cap compound ... third surface that is parallel planar and above the first die active first surface and below the first die backside second surface”. Naka adds nothing to remedy this deficiency. Because all the claim limitations are not taught in the cited references, alone or in combination, a *prima facie* case of obviousness has not been established. Withdrawal of the rejection is respectfully requested.

Conclusion

Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney, John Greaves at (801) 278-9171, or Applicant's below-named representative to facilitate the prosecution of this application. If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

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Date Aug. 31, 2005

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CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: MS Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 31 day of August 2005.

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